


Guilherme Limberg

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 Brazilian

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EDUCATION AND APPOINTMENTS

2024–2027

KICP Postdoctoral Fellow – University of Chicago

[KICP Fellowship Class of 2024](#)

2020–2024

Ph.D. in Astronomy – Universidade de São Paulo

with 12-month visiting period at the University of Chicago

Advisor: Prof. [Silvia Rossi](#)

Thesis: [Dwarf galaxies galore: the stellar populations of disrupted Milky Way satellites](#)

2016–2019

B.Sc. in Astronomy – Universidade de São Paulo

Advisor: Prof. Silvia Rossi

Final term work: [Spectroscopy of metal-poor star candidates with SOAR/Goodman](#) (PT-BR)

FUNDING, GRANTS, AND AWARDS

2025

IReNA Visiting Fellowship – Leibniz-Institut für Astrophysik Potsdam

Local host: Dr. [Cristina Chiappini](#)

Total: 1,000 USD per week × 3 weeks = 3,000 USD (IReNA)

2022–2023

Research Internship Abroad – University of Chicago

Local supervisor: Prof. [Alexander P. Ji](#)

Total: 30,360 USD (FAPESP) + 30,720 BRL (Brazilian reais, FAPESP) + 7,480 USD (UChicago)

2022–2024

Doctorate – FAPESP – IAG/USP

2020–2022

Doctorate – CAPES – IAG/USP

2018–2019

Undergraduate Research – PIBIC/CNPq – IAG/USP

Project: Classification of r -process Enhanced Stars

Total: 4,800 BRL

2020

Award – Best Ongoing PhD Presentation – V IAG Science Day

QUANTITATIVE INDICATORS

Total number of refereed papers: 36 published or submitted/in review

Citations: 465 | h -index: 12 | [NASA/ADS](#)

1st author: 7 | N th author: 34

See the list of publications for details.

COLLABORATION MEMBERSHIP

Member: The StarHorse team

Member: Sloan Digital Sky Survey (SDSS)

Member: Southern Stellar Stream Spectroscopic Survey (S^5)

Member: DECam Local Volume Exploration Survey (DELVE)

Member: Mapping the Ancient Galaxy in CaHK (MAGIC)

Member: Southern Photometric Local Universe Survey (S-PLUS)

SKILLS

Languages	Portuguese, English, Spanish, German (basic), French (basic)
Programming	Languages: Python (main), R-project
Other resources	IRAF/DRAGONS/CarPy (data reduction), TOPCAT (large data sets), AGAMA/galpy/Gala (dynamics), smhr/LESSPayne/MOOG (spectroscopy)
Surveys	Gaia, APOGEE, GALAH, SEGUE, LAMOST, 2MASS, WISE, S/J-PLUS, DELVE, S^5 , DESI
Public codes	Orbit integration with AGAMA with Monte Carlo for uncertainty propagation HDBSCAN with Monte Carlo for clustering applications with data uncertainties Abundance table generator for high-resolution spectroscopy Star cluster sky distribution plot with Gaia's Milky Way image background Google Colab notebook with Python tools for handling MESA stellar evolution models

LEADERSHIP AND SERVICE

	Refereeing: MNRAS, A&A, AAS journals
2024–2025	Organizer: Thursday lunch journal club at KICP/UChicago
2021–	Organizer: Milky Way Brazilian weekly group meeting
2022–2023	Organizer: Cycle of Seminars of the Astronomy Department of IAG/USP (YouTube)
2022–2023	Students representative: Astronomy Department Council (IAG/USP)
2022–2023	Students representative: Astronomy Graduate Committee (IAG/USP)
2021–2022	Students representative: Research Committee (IAG/USP)
2021	Organizer (LOC): VI IAG Science Day
2019–	Member: Sociedade Astronômica Brasileira (SAB) <i>Brazilian Astronomical Society</i>

TEACHING

2023–2025	Supervision: undergraduate research project Co-supervising, alongside Prof. Silvia Rossi and Dr. Hélio Perottoni, the undergraduate research project of student João V. N. dos Santos, entitled “The metallicity distribution function of the Typhon stellar stream”.
2021	Supervision: undergraduate thesis work Co-supervised, alongside Prof. Silvia Rossi, the undergraduate thesis work of student Fernanda Nogueira, entitled “ The Population of Accreted Globular Clusters of the Milky Way ” (PT-BR).
2021/1	Teaching assistant: Introduction to Astronomy I All materials I produced can be found in this Google Drive . I also developed Python codes for the students to interact with MESA stellar evolution models (via Google Colab).
2019/2	Teaching assistant: Fundamental Astronomy
2018–2019	Physics Teacher: Cursinho da FEA Physics teacher at “Cursinho da FEA”, a social project by Economics, Business Administration, and Accountancy undergraduates of USP providing education focused on entrance exams for public universities to high-school students in situation of socioeconomic vulnerability.
2016–2019	Physics Teacher: Cursinho Popular da Poli USP Physics teacher at “Cursinho Popular da Poli USP”, a social project by Engineering undergraduates of USP providing education focused on entrance exams for public universities to high-school students in situation of socioeconomic vulnerability.

PRESENTATIONS

- 2025 **AIP Milky Way and the Local Volume Seminar** (invited)
Potsdam/Germany Talk | Tidal disruption of “mega-diffuse” dwarf galaxies and the MZR in the Local Group
- 2025 **University of Notre Dame Astrophysics Seminar** (invited)
South Bend/USA Talk | Stars, star clusters, and the central black hole from the Milky Way’s Last Major Merger
- 2025 **Joint Galactic Archaeology group meeting between Lund Observatory and University of Florence** (invited)
Virtual Talk | Stars, star clusters, and the central black hole from the Milky Way’s Last Major Merger
- 2024 **Deciphering the Cosmic Code for Galaxy Formation**
Puerto Varas/Chile Talk | The Puzzle of “Extremely Diffuse” Dwarf Satellite Galaxies in the Local Group
- 2024 **IAU Symposium 395: Stellar Populations in the Milky Way and Beyond**
Paraty/Brazil Talk | The Rise of the r -process in Dwarf Galaxies
- 2024 **XLVII Meeting of the Brazilian Astronomical Society** (plenary)
Águas de Lindóia/Brazil Talk | The Puzzle of “Extremely Diffuse” Dwarf Satellite Galaxies in the Local Group
- 2024 **Cycle of Seminars of the Astronomy Department of IAG/USP** (invited)
São Paulo/Brazil Talk | Galaxy evolution at small scales with disrupted Milky Way satellites ([YouTube](#))
- 2024 **XXXII IAU General Assembly**
Cape Town/South Africa Talk | The Rise of the r -process in Dwarf Galaxies
- 2024 **NOIRLab South Colloquium** (invited)
La Serena/Chile Talk | The Rise of the r -process in Dwarf Galaxies
- 2024 **Astrophysics Colloquium at NAT** (invited)
São Paulo/Brazil Talk | Galaxy evolution at small scales with disrupted Milky Way satellites
- 2024 **Astronomia ao Meio-dia** (invited, PT-BR)
São Paulo/Brazil Talk | Arqueologia Estelar: a Origem dos Elementos Leves e as Primeiras Estrelas ([YouTube](#))
- 2024 **S-PLUS Collaboration Biweekly Meetings** (invited)
Virtual Talk | The Outskirts of Dwarf Galaxies with Narrow-band Photometry and Spectroscopy
- 2024 **First Stars VII**
New York City/USA Poster | The Rise of the r -process
- 2024 **UFRGS Department of Astronomy Seminar Series** (invited)
Virtual Talk | The Rise of the r -process ([YouTube](#))
- 2024 **Astronomia ao Meio-dia** (invited, PT-BR)
São Paulo/Brazil Talk | Supernovas vs. Fusões de Estrelas de Nêutrons ([YouTube](#))
- 2023 **Prof. Fong’s Group Meeting at Northwestern University** (invited)
Virtual Talk | r -process in Surviving and Disrupted Dwarf Galaxies
- 2023 **VIII IAG Science Day**
São Paulo/Brazil Talk | The (non-)Universality of Chemical Enrichment by First Stars ([YouTube](#))
- 2023 **KICP Near-field Cosmology Group Meetings** (invited)
Chicago/USA Talk | Chemodynamical Properties of Wukong Dwarf-galaxy Stellar Stream
- 2023 **Princeton Astro Galread discussion group** (invited)
Princeton/USA Talk | Detailed Abundances of the Dwarf-galaxy Stellar Stream Wukong/LMS-1
- 2023 **Great Lakes Clusters and Streams**
Ann Arbor/USA Talk | Accreted Globular Clusters
- 2023 **Galactic Frontiers: Dwarf Galaxies in the Local Volume and Beyond**
New York City/USA Talk | Detailed Abundances of Wukong/LMS-1 Dwarf-galaxy Stellar Stream

2023 Chicago/USA	Workshop on Stellar Properties from NLTE Radiative Transfer Talk Chemical Abundances of the Disrupted Dwarf-galaxy Stream Wukong in 1D LTE
2023 East Lansing/USA	CeNAM Frontiers in Nuclear Astrophysics Meeting Talk Abundance Patterns of the Dwarf-galaxy Stream Wukong, a.k.a. LMS-1
2023 Pasadena/USA	Carnegie Observatories Lunch Talk Seminar Series (invited) Talk The Origin of the Metallicity Gradient in Sagittarius Stellar Stream (YouTube)
2023 Virtual	S-PLUS Collaboration Biweekly Meetings (invited) Talk The Origin of Stellar-population Variations in Sagittarius Stream Revealed by S-PLUS
2023 Chicago/USA	KICP Near-field Cosmology Group Meetings (invited) Talk The Life and Death of Sagittarius Dwarf Spheroidal Galaxy
2022 Virtual	3rd S-PLUS Mini-workshop: Galactic Structure (invited) Talk Galactic Archaeology with S-PLUS and <i>Gaia</i> : News on Stellar Streams and Dwarf Galaxies
2022 Tucson/USA	FLASH: Lunch Astrophysics Seminar Hour at NOIRLab Headquarters (invited) Talk Footprints of the Milky Way's Last Major Merger
2022 São Caetano do Sul/Brazil	SPAnet Workshop on Artificial Intelligence in Astronomy Talk Using Unsupervised Clustering to Unveil the Fine-grained Structure of the Galactic Halo
2022 Virtual	XLV Meeting of the Brazilian Astronomical Society Talk Phase-space Morphology and Chemistry of the Sagittarius Stellar Stream
2022 Rio de Janeiro/Brazil	17th S-PLUS Collaboration Meeting Talk Dwarf Galaxies Galore: Disrupted and Intact Milky Way Satellites in S-PLUS
2022 Virtual	Cycle of Seminars of the Astronomy Department of IAG/USP (invited) Talk Reconstructing an Ancient Dwarf Galaxy with Stars and Globular Clusters (YouTube)
2021 Virtual	VI IAG Science Day Talk Dwarf Galaxies of the Past Revealed With Nearby Stars (YouTube)
2021 Virtual	XLIV Meeting of the Brazilian Astronomical Society Talk Fragments of Ancient Dwarf Galaxies
2021 Virtual	GALAH Science Meeting Talk Fragments of an Ancient Dwarf Galaxy (YouTube)
2021 Virtual	15th S-PLUS Collaboration Meeting Talk Chemodynamical Studies of the Galaxy with S-PLUS and <i>Gaia</i>
2021 Virtual	Seminar at Nicolaus Copernicus Astronomical Center (invited) Talk Dynamically Tagged Groups of Very Metal-poor Halo Stars
2020 Virtual	V IAG Science Day Talk Ancient Stars in the Galaxy (YouTube)
2019 São Paulo/Brazil	IV IAG Science Day Talk Looking for Metal-poor Stars
2019 São Paulo/Brazil	XLIII Meeting of the Brazilian Astronomical Society Poster Classification of <i>r</i> -Process Enhanced Stars
2019 São Paulo/Brazil	XLIII Meeting of the Brazilian Astronomical Society Poster Spectroscopy of Metal-poor Star Candidates with SOAR/Goodman

TELESCOPE ALLOCATION

2025B PI	Magellan Clay – MIKE (2 nights) The Origin of Ancient Stellar Populations in the Milky Way's Outer Halo and its Dwarf Spheroidal Satellites – 2025B-07
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- 2025A **Gemini North and South – GMOS (34.1h)**
PI Spectroscopic Confirmation of Extremely Metal-poor Stars from Gaia XP – GN-2025A-Q-407 + GS-2025A-Q-410
- 2025A **VLT – X-Shooter (10.5h)**
Co-I Uncovering the Abundance Pattern of Population III Enrichment in a First Galaxy-like Environment – 114.28L2
- 2025A **Magellan Clay – MIKE (2 nights)**
PI Early Chemical Enrichment in Sextans and Carina Dwarf Spheroidal Galaxies – 2025A-02
- 2025A **Blanco – DECam (2.5 nights)**
Co-I Mapping the Elusive Tidal Tails of the Crater II Dwarf Spheroidal Galaxy – 2025A-402104
- 2025A **Blanco – DECam (2 nights)**
Co-I Tracing the Galactic Journey of Omega Centauri: DECam CaHK Photometry of Its Tidal Tails – 2025A-942172
- 2024B **Gemini South – GMOS (19.3h)**
Co-I Optical Spectroscopic Confirmation of Extremely Metal Poor Stars Identified in the DECam CaI-K MAGIC Imaging Survey – GS-2024B-Q-416
- 2024B **Magellan Clay – MIKE (2 nights)**
PI Detailed Chemistry of Low-mass Dwarf-galaxy Stellar Streams – 2024B-07
- 2024B **Gemini South – GHOST (17.7h)**
PI Testing the Chemical Evolution of *r*-process in a Low-mass Dwarf-galaxy Stellar Stream – GS-2024B-Q-111 + GS-2024B-Q-208
- 2024B **SOAR – Goodman (33.0h)**
Co-I Finding the Brightest Very Metal-poor Star Candidates of the Galaxy – SO-2024B-005
- 2024A **Gemini South – GMOS (5.4h)**
Co-I The MAGIC Touch: Spectroscopic Confirmation and Calibration of Extremely Metal-Poor Stars Identified From CaHK Photometric Imaging – GS-2024A-FT-115
- 2024A **Gemini South – GHOST (25.0h)**
PI Testing the Universality of Chemical Enrichment by First Stars in Sextans Dwarf Galaxy – GS-2024A-Q-109 + GS-2024A-Q-206
- 2024A **Gemini South – GHOST (29.0h)**
Co-I Chemical Evolution at its Extreme Using Detailed Abundances of Ultra-faint Dwarf Galaxy Stars – GS-2024A-Q-130 + GS-2024A-Q-225
- 2024A **Blanco – DECam (4 nights)**
Co-I Searching for Evidence of the Orphan-Chenab Stream Progenitor with RR Lyrae Stars – 2024A-444496
- 2024A **Blanco – DECam (0.5 night)**
Co-I The Tidal Disruption of the DELVE 1 Ultra-faint Star Cluster: Clues to the Formation of Very Metal-poor Stellar Streams? – 2024A-930400
- 2024A **Blanco – DECam (1.5 night)**
Co-I A Search for Stellar Halos around the Faintest Dwarf Galaxies – 2024A-16717
- 2024A **Blanco – DECam (2 nights)**
Co-I Searching the Outskirts of Milky Way Dwarf Spheroidal Galaxies for Elusive Tidal Tails and Stellar Halos with DECam CaHK Photometry – 2024A-974884
- 2024A **SOAR – Goodman (29.0h)**
Co-I Finding the Brightest Very Metal-poor Star Candidates of the Galaxy – SO-2024A-004
- 2023B **Gemini South – GMOS (26.5h)**
PI Spectroscopic Confirmation of Extremely Metal-poor Stars from Gaia DR3 – GS-2023B-Q-107 + GS-2023B-Q-309

- 2023B–2026A (survey) **Blanco – DECam (54 nights)**
Co-I The DECam MAGIC Survey: Mapping the Ancient Galaxy in CaHK – 2023B-646244
- 2023A **Gemini South – GMOS (42.0h)**
PI Spectroscopic Confirmation of Extremely Metal-poor Star Candidates from Gaia DR3 – GS-2023A-Q-412
- 2023A **Gemini North – GRACES (14.0h)**
PI Testing the Revived Star Formation Scenario in an Outer Halo Stellar Stream – GN-2023A-Q-208
- 2023A **SOAR – Goodman (50.0h)**
Co-I Finding the Brightest Very Metal-poor Star Candidates of the Galaxy – SO-2023A-003
- 2022B **SOAR – Goodman (40.0h)**
Co-I Finding the Brightest Very Metal-poor Stars in the Galaxy – SO-2022B-002
- 2022B **Gemini North – GRACES (11.4h)**
PI The Brightest Extremely Metal-poor Stars in the Northern Sky – GN-2022B-Q-211
- 2022A **Gemini North – GRACES (14.4h)**
Co-I Unraveling the Accreted Origin of a Stellar Overdensity – GN-2022A-Q-114 + GN-2022A-Q-209
- 2022A **SOAR – Goodman (8.0h)**
Co-I Abundance Variations and Radial Differences Between the Two Populations of the Globular Cluster NGC7089 – SO-2022A-001
- 2022A **SOAR – Goodman (40.0h)**
Co-I Finding the Brightest Very Metal-poor Stars in the Galaxy – SO-2022A-006
- 2021B **Gemini North – GRACES (2.3h)**
PI The Brightest Ultra Metal-poor Star – GN-2021B-FT-116
- 2021B **Gemini North – GRACES (9.7h)**
PI The Chemodynamical Structure of the Ancient Galactic Halo – GN-2021B-Q-111
- 2021B **SOAR – Goodman (40.0h)**
Co-I Finding the Best Very Metal-poor Stars in the Galaxy – SO-2021B-006
- 2021A **Gemini North – GRACES (2.2h)**
PI The Chemical-abundance Pattern of a Long-vanished Dwarf Galaxy – GN-2021A-FT-209
- 2021A **Gemini North – GRACES (3.0h)**
PI Ancient Stars in the Galactic Disk – GN-2021A-FT-205
- 2021A **SOAR – Goodman (40.0h)**
Co-I Finding the Best Very Metal-poor Stars in the Galaxy – SO-2021A-007
- 2021A **Gemini North – GRACES (14.2h)**
PI The Chemodynamical Structure of the Ancient Galactic Halo – GN-2021A-Q-111
- 2020B **SOAR – Goodman (20.0h)**
Co-I Finding the Best Very Metal-poor Stars in the Galaxy – SO-2020B-008

1st AUTHOR PUBLICATIONS

- 2024 **Black Hole Scaling Relations in the Dwarf-galaxy Regime with *Gaia*-Sausage/Enceladus and ω Centauri**
ApJL **Limberg, G.** (NASA/ADS)
- 2024 **Extending the Chemical Reach of the H3 Survey: Detailed Abundances of the Dwarf-galaxy Stellar Stream Wukong/LMS-1**
MNRAS **Limberg, G.**; Ji, A. P.; Naidu, R. P.; Chiti, A.; Rossi, S.; Usman, S. A.; Ting, Y. S.; Zaritsky, D.; Bonaca, A.; Borbolato, L.; Speagle, J. S.; Chandra, V.; Conroy, C.. (NASA/ADS)

- 2023 *ApJ* **Phase-space Properties and Chemistry of the Sagittarius Stellar Stream Down to the Extremely Metal-poor ($[\text{Fe}/\text{H}] < -3.0$) Regime**
Limberg, G.; Queiroz, A. B. A.; Perottoni, H. D.; Rossi, S.; Amarante, J. A. S.; Chiappini, C.; Santucci, R. M.; Pérez-Villegas, A.; Lee, Y. S.. ([NASA/ADS](#))
- 2022 *ApJ* **Reconstructing the Disrupted Dwarf Galaxy *Gaia*-Sausage/Enceladus Using its Stars and Globular Clusters**
Limberg, G.; Souza, S. O.; Pérez-Villegas, A.; Rossi, S.; Perottoni, H. D.; Santucci, R. M.. ([NASA/ADS](#))
- 2021 *ApJL* **Abundance Patterns of α and Neutron-capture Elements in the Helmi Stream**
Limberg, G.; Santucci, R. M.; Rossi, S.; Queiroz, A. B. A.; Chiappini, C.; Souza, S. O.; Perottoni, H. D.; Pérez-Villegas, A.; Barbosa, F. O.. ([NASA/ADS](#))
- 2021 *ApJ* **Targeting Bright Metal-poor Stars in the Disk and Halo Systems of the Galaxy**
Limberg, G.; Santucci, R. M.; Rossi, S.; Shank, D.; Placco, V. M.; Beers, T. C.; Schlafman, K. C.; Casey, A. R.; Perottoni, H. D.; Lee, Y. S.. ([NASA/ADS](#))
- 2021 *ApJ* **Dynamically Tagged Groups of Very Metal-poor Halo Stars from the HK and Hamburg/ESO Surveys**
Limberg, G.; Rossi, S.; Beers, T. C.; Perottoni, H. D.; Pérez-Villegas, A.; Santucci, R. M.; Abuchaim, Y.; Placco, V. M.; Lee, Y. S.; Christlieb, N.; Norris, J. E.; Bessell, M. S.; Ryan, S. G.; Wilhelm, R.; Rhee, J.; Frebel, A.. ([NASA/ADS](#))

Nth AUTHOR PUBLICATIONS

- Submitted*
ApJ **The DECam MAGIC Survey: A Wide-field Photometric Metallicity Study of the Sculptor Dwarf Spheroidal Galaxy**
 Barbosa, F. O.; Chiti, A.; **Limberg, G.**; Pace, A.; Cerny, W.; Rossi, S.; Carlin, J. L.; Stringfellow, G.; Placco, V.; Atzerberg, K.; Carballo-Bello, J. A.; Chaturvedi, A.; Choi, Y.; Crnojevic, D.; Drlica-Wagner, A.; Ji, A. P.; Kallivayalil, N.; Martínez-Vázquez, C.; Medina, G.; Noel, N.; Sand, D.; Vivas, K.; Bom, C.; Ferguson, P.; Mutlu-Pakdil, B.; Navabi, M.; Riley, A. H.; Sakowska, J.; Zenteno, A.. ([NASA/ADS](#))
- Submitted*
ApJ **Early Co-formation of the Milky Way's Thin and Thick Disks at Redshift $z > 2$**
 Borbolato, L.; Rossi, S.; Perottoni, H. D.; **Limberg, G.**; Amarante, J. A. S.; Queiroz, A. B. A.; Chiappini, C.; Anders, F.; Santucci, R. M.; Barbosa, F. O.; Nogueira-Santos, J. V.. ([NASA/ADS](#))
- 2025
ASCL **LESSPayne: Labeling Echelle Spectra with SMHR and Payne**
 Ji, A. P.; Casey, A. R.; Ting, Y.-S.; Holmbeck, E. M.; Frebel, A.; Usman, S. A.; **Limberg, G.**; Shah, S. P.; Chiti, A.; Ezzeddine, R.; Hansen, T. T.; Placco, V. M.; Roederer, I. U.; Sakari, C. M.. ([NASA/ADS](#))
- Submitted*
A&A **The S-PLUS Fornax Project (S+FP): Mapping $\text{H}\alpha$ + $[\text{N II}]$ Emission in 77 Fornax Galaxy Members Reaching $\sim 4 R_{\text{vir}}$**
 Lopes, A. R.; Smith Castelli, A. V.; Krabbe, A. C.; Hernandez-Jimenez, J. A.; Pallero, D.; Torres-Flores, S.; Telles, E.; Sarzi, M.; Cortesi, A.; Thainá-Batista, J.; Cid Fernandes, R.; Lacerda, E. A. D.; Sampaio, M.; Sasse, V. H.; R. Herpich, F.; Andruchow, I.; Demarco, R.; Gutiérrez Soto, L. A.; Grossi, M.; Haack, R. F.; Humire, P. K.; Lima-Dias, C.; **Limberg, G.**; Lobo, C.; Lomelí-Núñez, L.; Lopes, P. A. A.; Olave-Rojas, D. E.; Werner, S. V.; Almeida-Fernandes, F.; Oliveira Schwarz, G. B.; Schoenell, W.; Ribeiro, T.; Kanaan, A.; Mendes de Oliveira, C..
- In press*
ApJ **Flipping of the Tidal Tails of the Ophiuchus Stream due to the Decelerating Galactic Bar**
 Yang, Y.; Lewis, G. F.; Erkal, D.; Li, T. S.; Li, A. P.; Martell, S. L.; Cullinane, L. R.; **Limberg, G.**; Zucker, D. B.; Bland-Hawthorn, J.; Pace, A. B.; Da Costa, G. S.; Ji, A. P.; Koposov, S. E.; Kuehn, K.; Shipp, N.; Pearson, M.; Usman, S. A.. ([NASA/ADS](#))
- 2025
ApJ **Early r -process Enrichment and Hierarchical Assembly Across the Sagittarius Dwarf Galaxy**
 Ou, X.; Yelland, A.; Chiti, A.; Frebel, A.; **Limberg, G.**; Mardini, M. K.. ([NASA/ADS](#))
- 2025
ApJ **Deep Photometric Observations of Ultra-Faint Milky Way Satellites Centaurus I and Eridanus IV**
 Casey, Q. O.; Mutlu-Pakdil, B.; Sand, D. J.; Pace, A. B.; Crnojević, D.; Doliva-Dolinsky, A.; Cerny, W.; Heiger, M. E.; Riley, A. H.; Ji, A. P.; **Limberg, G.**; Marin, L.; Martínez-Vázquez, C. E.; Medina, G. E.; Li, T. S.; Campana, S. N.; Chaturvedi, A.; Sakowska, J. D.; Zenteno, A.; Carballo-Bello, J. A.; Navabi, M.; Bom, C. R.. ([NASA/ADS](#))

- Submitted
ApJ **The Southern Photometric Local Universe Survey (S-PLUS): Searching for Metal-poor Dwarf Galaxies**
Grossi, M.; Gonçalves, D. R.; Krabbe, A. C.; Gutiérrez Soto, L. A.; Telles, E.; Ribeiro, L. S.; Signorini Gonçalves, T.; Lopes, A. R.; Smith Castelli, A. V.; De Rossi, M. E.; Lima-Dias, C.; **Limberg, G.**; Ferreira Lopes, C. E.; Hernandez-Jimenez, J. A.; Humire, P. K.; Chies Santos, A. L.; Lomel-Nuñez, L.; Torres-Flores, S.; Herpich, F. R.; Oliveira Schwarz, G. B.; Kanaan, A.; Mendes de Oliveira, C.; Ribeiro, T.; Schoenell, W.. ([NASA/ADS](#))
- 2025
ApJL **Streams, Shells, and Substructures in the Accretion-built Stellar Halo of NGC 300**
Fielder, C. E.; Sand, D. J.; Jones, M. G.; Crnojević, D.; Drlica-Wagner, A.; Bennet, P.; Carlin, J. L.; Cerny, W.; Doliva-Dolinsky, A.; Hunter, L. C.; Karunakaran, A.; **Limberg, G.**; Mutlu-Pakdil, B.; Pace, A. B.; Pearson, S.; Smercina, A.; Spekkens, K.; Starkenburg, T.; Strader, J.; Stringfellow, G. S.; Tollerud, E.; Bom, C. R.; Carballo-Bello, J. A.; Chaturvedi, A.; Choi, Y.; James, D. J.; Martínez-Vázquez, C. E.; Riley, A.; Sakowska, J.; Vivas, A. K.. ([NASA/ADS](#))
- In review
ApJ **Chemical Abundances in the Leipter Stellar Stream: a Disrupted Ultra-faint Dwarf Galaxy?**
Atzberger, K. R.; Usman, S. A.; Ji, A. P.; Cullinane, Lara R.; Erkal, D.; Hansen, T. T.; Lewis, G. F.; Li, T. S.; **Limberg, G.**; Luna, A.; Martell, S. L.; McKenzie, M.; Pace, A. B.; Zucker, Daniel B.. ([NASA/ADS](#))
- 2025
ApJ **Discovery and Spectroscopic Confirmation of Aquarius III: a Low-Mass Milky Way Satellite Galaxy**
Cerny, W.; Chiti, A.; Geha, M.; Mutlu-Pakdil, B.; Drlica-Wagner, A.; Tan, C. Y.; Adamów, M.; Pace, A. B.; Simon, J. D.; Sand, D. J.; Ji, A. P.; Li, T. S.; Vivas, A. K.; Bell, E. F.; Carlin, J. L.; Carballo-Bello, J. A.; Chaturvedi, A.; Choi, Y.; Doliva-Dolinsky, A.; Gnedin, O. Y.; **Limberg, G.**; Martínez-Vázquez, C. E.; Mau, S.; Medina, G. E.; Navabi, M.; Noël, N. E. D.; Placco, V. M.; Riley, A. H.; Roederer, I. U.; Stringfellow, G. S.; Bom, C. R.; Ferguson, P. S.; James, D. J.; Martínez-Delgado, D.; Massana, P.; Nidever, D. L.; Sakowska, J. D.; Santana-Silva, L.; Sherman, N. F.; Tollerud, E. J.. ([NASA/ADS](#))
- 2025
A&A **Stellar Atmospheric Parameters and Chemical Abundances of ~5 Million Stars from S-PLUS Multi-band Photometry**
Ferreira Lopes, C. E.; Gutiérrez-Soto, L. A.; Ferreira Alberice, V. S.; Monsalves, N.; Hazarika, D.; Catelan, M.; Placco, V. M.; **Limberg, G.**; Almeida-Fernandes, F.; Perottoni, H. D.; Smith Castelli, A. V.; Akas, S.; Alonso-García, J.; Cordeiro, V.; Jaque Arancibia, M.; Daflon, S.; Dias, B.; Gonçalves, D. R.; Machado-Pereira, E.; Lopes, A. R.; Bom, C. R.; Thom de Souza, R. C.; de Isídio, N. G.; Alvarez-Candal, A.; De Rossi, M. E.; Bonatto, C. J.; Cubillos Palma, B.; Borges Fernandes, M.; Humire, P. K.; Oliveira Schwarz, G. B.; Schoenell, W.; Kanaan, A.; Mendes de Oliveira, C.. ([NASA/ADS](#))
- 2025
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